

# ARNE TISELIUS, 69; WON NOBEL IN '48

Swedish Chemist Honored  
for Protein Work Dies

UPPSALA, Sweden, Oct. 29 (UPI)—Prof. Arne Tiselius, who won the Nobel Prize for Chemistry in 1948, died at his home here today. He was 69 years old.

## On Faculty Since 1925

Dr. Tiselius, a member of the Uppsala University faculty since 1925, received the Nobel prize for discoveries concerning the complex nature of the serum proteins.

He was named professor of biochemistry in 1939 and retired a few years ago.

Dr. Tiselius was tall and sufficiently handsome for his students to dub him "the film star professor."

The work that won the Nobel Prize took in the development of a system for making large molecules, such as proteins, move through a solution under the influence of electricity. He devised two instruments, now used by scientists throughout the world, to separate proteins into many chemical compounds.

The basic problem before "the Tiselius apparatus," as the device became known, was that a number of the building blocks of life, the proteins, had the same size and weight, so that whirling in a centrifuge could not separate one from the other.

Dr. Tiselius took advantage of the fact that what he called "the Siamese twins of living matter," while exactly the same in size, shape and weight, had differing electrical properties because of their differing chemical constitution.

He devised a new model of the electrophoresis tube to separate the various entities in accordance with their electrical properties, rather than size and weight, and also devised a technique to overcome the effects of the heat generated by the electricity.

When Dr. Tiselius won the prize, then \$44,371.63, he said: "I never dreamed of such an honor. It comes as a complete surprise. I'm very happy to get the award. It will be a great help in enabling me to continue my research."

Dr. Tiselius worked at the Rockefeller Institute in New York in 1939 and was helped in his work by the Rockefeller Foundation. He studied at Princeton in 1934-35.